

RELATIONSHIPS BETWEEN OPEN EDUCATION STUDENTS' ECONOMIC PROFILES AND THEIR USE OF INTERNET IN EDUCATION

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ABSTRACT

The study aims to identify the economic profiles of Open Education Faculty students and to determine the relationship between their economic profiles and the following of online courses using Internet. In the study survey model was used. The population of the study was composed of 4652 Anadolu University Open Education Faculty students who live in Bolu. Sample of the study consisted of 361 students randomly selected from research population. Data were obtained by surveys. Some of the research findings are as follows: the income levels of parents for both unemployed and single and employed students are in the range of 0-1300 TL. Since almost all the mothers are housewives, they do not have separate incomes. Fathers for both unemployed and single and employed students are commonly workers, retired individuals, self employed individuals and public officials. Meaningful relationships were observed between the economic profiles of employed students which include opportunities such as having access to a computer at the workplace or owning one at home and following the classes through Internet.

Keywords: Economic Profile, Open Education Student, e-learning

BACKGROUND

By definition, education is the provision of services. Services can be considered as economic assets when scarce resources such as labour, capital, natural resources and land are used in the process of its production. Since services are economic assets, they have both production and consumption features. If education is demanded in order to acquire a profession it is considered to carry characteristics of production and if it is for pleasure it is considered as carrying features of consumption.

In a world whose population is increasing rapidly, individuals have started to demand more education as a result of the social pressures especially to receive higher education in order to have a profession (Agaoglu, Imer, Kurubacak, 2002; Kurul Tural, 2002). The lack of capacity in the existing universities has necessitated capacity development in higher education (Fayyoumi, 2009) which has created direct and indirect new costs. These costs normally occur in areas such as construction of new buildings, establishment of new departments, training instructors and provision of equipment.

The fact that these costs make up of a large part of the budget in institutions have led these institutions in the search of alternatives. Along with this search, the effects of the rapid transformation in the world have been observed in education as it is observed in every field.

The most basic change observed in education has been the increase of informal training approaches along with formal ones. The most preferred informal educational approach is distance teaching model.

The most important reasons for this preference may be related to the fact that distance education model addresses students from all walks of life who would like to receive university education and its alternative costs are lower.

Distance education model eliminates the requirement to choose education over employment life or vice versa since it allows individuals to receive training while continuing their work lives and other tasks (Laaser, 2008; Mutlu, Oztürk, Cetinoz, 2002).

This model has been introduced to Turkey with the establishment of Anadolu University Open Education Faculty in the 1980s and it has become widespread. Open Education Faculty has nowadays allocated a large part of its educational journey to e-learning which had originally started with broadcasting of classes from the radio or TV. E-learning has been preferred mostly due to the facts that the resources are open to users and there is no fee to utilize these resources (Azeta, Oyelami & Ayo, 2008). In the Anadolu University Distance Education Model which provides a serious contribution to education through e-learning approaches, e-learning have started to be used as Internet Based Practice Exams in order to help students to prepare for exams more effectively with interactive computer studies presented as a parallel to TV and textbooks. "Open Education e-learning Portal" has been used since May 2005 which allows students to study when and where they want with the help of the Internet. Open education e-learning Portal consists of electronic textbooks (e-books), TV Education Programs (e-TV), worksheet software (e-worksheet), practice exams (e-exam), academic advisory services (e-consulting) and audio books (e-audio books).

Open Distance Learning students can participate in these applications by watching the course content, by answering questions and by testing themselves in this multi media (TV, video, audio, graphics and animation) interactive environment. Open Education Faculty practice exams have been developed for open education students so that they can have a realistic idea online of their achievements and their levels prior to actual exams (<http://ds.anadolu.edu.tr>; Mutlu & Gülen, 2002).

According to Emmungil's (2007) study, it is more economical to have access to classroom materials and resources online and to give exams using computers. In a similar context, Rosenberg (2001) states that e-learning strategies have changed the learning methods for individuals. One of the acquisitions as a result of the transformed learning methods is the formation of "self learning" concept. The individuals who learn how to reach current knowledge and information online rapidly by the use of internet technologies develop their self learning skills and acquire new competences (Erturgut, 2008; Mutlu, Ozturk & Cetinoz, 2002; Koksoy, 2004).

A similar system to Face to Face Academic Advising Services for open education students have started online in 2007-2008 Educational Year with Anadolu University Open Distance Education System. e-audio books application has been created not only for the benefit of visually disabled students but also for students who prefer studying by listening. Students can benefit from all these services free of charge (http://www.anadolu.edu.tr/aos/aos_tanitim/e-ogrenme_hiz.aspx). However, although these services are free of charge and appear that they do not create any financial burden on the student, it can be sometimes overlooked that students need to own a computer which is connected to Internet.

In this context, studies related to distance education in literature are noteworthy. In the 1980s, studies mostly focused on distance education (learning, attitude, repeating the class) and the management processes (cost effectiveness, content design) (McIssac et al., 1989) and in the 1990s the research topics consisted of course and program design in distance education, effectiveness of technology and general research (Phipps & Merisotis, 1999). Recently, the change in the structure, philosophy and operations in distance education has caused a change in the research topics as well. Transformation of the structure of distance education into e-learning and internet requires changes in the student profiles.

Students need to have sufficient knowledge and skills in order to benefit from e-learning activities. Also, the presented opportunities will only be valuable as much as they are utilized. The website prepared by Anadolu University for open education students can be reached easily and is beneficial for students who have access to computers and Internet. However, the facts that some students live in areas with no constant and stable electrical power and that they can only use computers at the Internet cafes can be barriers for the utilization of these opportunities presented to them by the University. Also, having the resources but having no awareness of how to use these services can be another barrier. In this context, this study aims to identify the economic profiles of Open Education Faculty students and to investigate the relationships between personal characteristics- economic profiles and following the courses through Internet. The questions investigated in line with this aim are:

- What are the economic profiles (employment status, income levels etc) of open education students?
- Is there a relationship between personal characteristics- economic profiles of these students and their following the courses through Internet?

METHOD

Research Model

The study utilizes the survey model. It is a descriptive research that aims to display an existing situation in its entirety (Karasar, 2010).

Population and Sampling

The population of the study was composed of 4652 Anadolu University Open Education Faculty students who live in Bolu. The sample of the population consisted of 361 students randomly selected from the research population. According to Krejcie and Morgan (1970; cited in: Gay, 1996), a sample of 346 individuals represents a population of 4500. Hence it is believed that sample size is sufficient to represent the population in the current study. Table I displays distribution of variables such as grade, age, gender and marital status.

Table: 1
Distribution of variables such as grade, age, gender and marital status
for students in the sample

| Variables | f | % |
|-----------|-------------------|-----|
| Grade | Freshman | 208 |
| | Sophomore | 107 |
| | Junior | 23 |
| | Senior | 17 |
| | | 181 |
| | Suspended classes | 4 |
| | Prep. class | 2 |
| | | ,6 |

| | | | |
|-----------------------|---------------------|------------|--------------|
| | 18–20 | 78 | 21,6 |
| | 21–23 | 109 | 30,2 |
| Age | 24–26 | 54 | 15,0 |
| | 27–29 | 30 | 8,3 |
| | 30 and above | 90 | 24,9 |
| Gender | Female | 185 | 51,2 |
| | Male | 176 | 48,8 |
| Marital Status | Married | 93 | 25,8 |
| | Single | 268 | 74,2 |
| Total | | 361 | 100,0 |

According to the data in Table 1, 57.6% of the students are in their freshmen year, 29.6% in sophomore year, 6.4% in junior year, 4.7% in senior year, 1.7% waiting for extra exams, and 0.6% are preparatory class students. 21.6% of the students are in the age range of 18-20, %30.2 of the students are in the age range of 21-23, 15% of the students are in the age range of 24-26, 8.3% of the students are in the age range of 27-29 and 24.9% are 30 or above. 51.2 5 of the students are females and 48.8% are males. 25.8% of the students are married and 74.2% are single.

Data Collection

Data for the study were collected in 2009-2010 educational year by a questionnaire developed the researcher. Related literature was utilized in the preparation of the questions. The questions have been revised as needed in terms of suitability by consulting 5 field experts. The final version of the questionnaire consists of 27 items. 4 of these items are related to personal demographics, 14 are related to the identification of students' economic profiles and the other 4 are related to identification of following the courses online through Internet.

Data Analysis

Statistical methods *frequency (f)* and *percentages (%)* were used in the identification of personal demographics and economic profiles of the students and *chi-square* statistical method was utilized in identifying the relationship between personal characteristics-economic profiles and the following of courses through the Internet.

The level of meaningful relationships was determined to be at the level of 0.05. Since the study was related to student economic profiles, each student needed to complete the sections appropriate for his/her situation (for example, if the student is employed, he/she answered the questions in the first section; if the student is unemployed he/she answered the questions in the second section).

Due to this reason, total numbers in tables may display differences.

FINDINGS

This section provides the findings obtained through the analyses and follows the questions in the order they were presented.

First research question: What are the economic profiles (employment status, income levels etc) of open education students?

Table: 2
Distribution of data according to accommodation

| Accommodation | f | % |
|-----------------------|------------|--------------|
| Rent | 113 | 31,3 |
| Assigned by workplace | 31 | 8,6 |
| Family owned | 137 | 38,0 |
| Individually owned | 72 | 19,9 |
| Other | 8 | 2,2 |
| Total | 361 | 100,0 |

31.3% of the students live in rental houses, 8.6% lives in houses assigned by the workplace, 38% lives in houses owned by their families, 19.9% lives in houses owned by themselves and 2.2% is dependent on other types of accommodation (such as hostels) (Table: 2).

Table: 3
Distribution of students according to employment

| Employment | f | % |
|--------------------|------------|--------------|
| Is employed | 191 | 52,9 |
| Is not employed | 158 | 43,8 |
| Employed half time | 12 | 3,3 |
| Total | 361 | 100,0 |

52.9% of the students are employed full time, 3.3% of students are employed half time and 43.8% of the students are unemployed (Table: 3).

Table: 4
Distribution of employed students according to their professions

| Profession | f | % |
|----------------------------|------------|--------------|
| Works in pharmacy | 4 | 2,1 |
| Lab Technician | 1 | 0,5 |
| Self employed-shopkeeper | 12 | 6,4 |
| Sales/Accounting | 15 | 7,8 |
| Public official | 55 | 28,8 |
| Doctor | 2 | 1 |
| Worker | 16 | 8,4 |
| Engineer | 2 | 1 |
| Teacher | 6 | 3,1 |
| Religious service provider | 13 | 6,8 |
| Cook | 1 | 0,5 |
| Works in private sector | 13 | 6,8 |
| Works in Transportation | 3 | 1,6 |
| Technician | 17 | 9 |
| Operator | 9 | 4,7 |
| Secretary | 6 | 3,1 |
| Soldier | 3 | 1,6 |
| Driver | 1 | 0,5 |
| Sportsman | 1 | 0,5 |
| Nurse | 8 | 4,2 |
| Unspecified | 3 | 1,6 |
| Total | 191 | 100,0 |

2.1% of the employed students work in pharmacies, 0.5% of the students work as lab technicians, 6.4% are shopkeepers, 7.8% are accountants, 28.8% are public officials,

1% of the students are doctors, 8.4% are workers, 1% of the students are engineers, 3.1% are teachers, 6.8% are religious service providers (imam), 0.5% of the students are cooks, 6.8% of the students work in private sector, 1.6% of the students work in transportation, 9% of the students are technicians, 4.7% of the students are operators, 3.1% of the students are secretaries, 1.65 of the students are soldiers, 0.5% of the students are drivers, 0.5% of the students are sportsmen, 4.2% of the students are nurses. 1.65 of the students has not specified their professions (Table: 4).

Table: 5 Distribution of level of income for employed students

| Level of income for employed students | f | % |
|---------------------------------------|-----|------|
| 0-655 | 46 | 24,1 |
| 656-1300 | 98 | 51,3 |
| 1301-1956 | 32 | 16,8 |
| 1957-2612 | 4 | 2,1 |
| 2613-3268 | 2 | 1 |
| 3925-4580 | 1 | 0,5 |
| 4581 and above | 3 | 1,6 |
| Unspecified | 5 | 2,6 |
| Total | 191 | 100 |

24.1% of the employed students earn in the range of 0-655 TL, 51,3% earn in the range of 656–1300 TL, 16,8% earn in the range of 1301–1956 TL, 2,1% earn in the range of 1957 and 2612 TL, 1% earn in the range of 2613–3268 TL, 0,5% earn in the range of 3925–4580 TL, 1,6% earn in the range of 4581 and above monthly income. 2,6% of the students have not specified their level of income (Table 5)

**Table 6
Distribution of income for unemployed students according to their fathers' income**

| Income levels of fathers for unemployed students | f | % |
|--------------------------------------------------|-----|------|
| 0-655 | 34 | 21,5 |
| 656-1300 | 71 | 44,9 |
| 1301-1956 | 11 | 7 |
| 1957-2612 | 8 | 5,1 |
| 2613-3268 | 2 | 1,2 |
| 3269-3924 | 1 | ,6 |
| 4581 and above | 1 | ,6 |
| Unspecified | 30 | 19 |
| Total | 158 | 100 |

21.5% of fathers of unemployed students have a monthly income in the range of 0-655 TL, 44,9% have a monthly income in the range of 656-1300 TL, 7% have a monthly income in the range of 1301-1956 TL, 5,1% have a monthly income in the range of 1957-2612 TL, 1,2% have a monthly income in the range of 2613-3268 TL, 1,2% have a monthly income in the range of 3269 TL and above. 19% of the non-working students have not specified the income levels of their fathers (Table 6)

Table 7: Distribution of fathers' profession for unemployed students

| Fathers' profession for unemployed students | f | % |
|---------------------------------------------|----|------|
| Worker | 16 | 10,1 |
| Retired | 34 | 21,5 |
| Self employed | 21 | 13,3 |
| Driver | 7 | 4,4 |
| Public official | 19 | 12 |

| | | |
|---------------------------|------------|--------------|
| Shopkeeper | 6 | 3,8 |
| Soldier | 2 | 1,3 |
| Technician | 5 | 3,2 |
| Cook | 5 | 3,2 |
| Farmer | 6 | 3,8 |
| Business man | 1 | 0,6 |
| Teacher | 3 | 1,9 |
| Security personnel | 4 | 2,5 |
| Lawyer | 1 | 0,6 |
| Engineer | 1 | 0,6 |
| Unspecified | 27 | 17,1 |
| Total | 158 | 100,0 |

10,1% of the fathers of unemployed students are workers,, **21,5%** of the fathers are retired, **13,3%** of the fathers are self employed, **4,4 %** of the fathers are drivers, **12%** of the fathers are public officials, **3,8%** of the fathers are shopkeepers, **1,3%** of the fathers are soldiers, **3,2%** of the fathers are technicians, **3,2%** of the fathers are cooks, **3,8%** of the fathers are farmers, **0,6%** of the fathers are business men, **1,9%** of the fathers are teachers, **2,5%** of the fathers are security personnel, **0,6 %** of the fathers are lawyers and **0,6%** of the fathers are engineers. **17,1%** of the students have not specified their fathers' profession (Table 7)

Table: 8
Distribution of income for unemployed students according to their mothers' income

| Income levels of mothers for unemployed students | f | % |
|---------------------------------------------------------|-----------|-------------|
| 0–655 | 8 | 5,2 |
| 656–1300 | 11 | 7 |
| 1301–1956 | 1 | 0,6 |
| 1957–2612 | 2 | 1,2 |
| 3269–3924 | 1 | 0,6 |
| 4581 and above | 1 | 0,6 |
| Unspecified | 13 | 84,8 |
| Total | 15 | 100 |
| | 8 | |

5,2% of mothers of unemployed students have a monthly income in the range of **0–655 TL**, **7%** have a monthly income in the range of **656–1300 TL**, **0,6%** have a monthly income in the range of **1301–1956 TL**, **1,2%** have a monthly income in the range of **1957–2612 TL**, **0,6%** have a monthly income in the range of **3269–3924TL**, **0,6%** have a monthly income in the range of **4581 and above**. **84,8%** are housewives so no income has been specified for them (Table: 8).

Table: 9
Distribution of mothers' profession for unemployed students

| Mothers' profession for unemployed students | f | % |
|----------------------------------------------------|-----------|-------------|
| Housewife | 13 | 84,8 |
| | 4 | |
| Retired | 6 | 3,8 |
| Nurse | 2 | 1,2 |
| Teacher | 3 | 1,9 |
| Accountant | 2 | 1,2 |
| Worker | 3 | 1,9 |

| | | |
|------------------------|-----------|------------|
| Self employed | 2 | 1,2 |
| Financier | 1 | 0,6 |
| Public Official | 4 | 2,4 |
| Total | 15 | 100 |
| | 8 | |

84,8% of the mothers of unemployed students are housewives. 3,8% are retired, 1,2% are nurse, 1,9% are teachers, 1,2% are accountants, 1,9% are workers, 1,2% are self employed, 0,6% are financiers and 2,4% are public officials (Table: 9).

Table: 10.
Distribution of income for single and employed students according to their fathers' income

| Fathers' income for employed and single students | f | % |
|---------------------------------------------------------|-----------|-------------|
| 0–655 | 16 | 20,8 |
| 656–1300 | 54 | 70,1 |
| 1301–1956 | 3 | 3,9 |
| 1957–2612 | 3 | 3,9 |
| 2613–3268 | 1 | 1,3 |
| Total | 77 | 100 |

20.8% of fathers of working and single students have a monthly income in the range of 0–655 TL, 70,1% have a monthly income in the range of 656–1300 TL, 3,9% have a monthly income in the range of 1301–1956 TL, 3,9% have a monthly income in the range of 1957–2612 TL, 1,3% have a monthly income in the range of 2613–3268 TL (Table: 10)

Table: 11
Distribution of fathers' profession for employed and single students

| Fathers' profession for employed and single students | f | % |
|-------------------------------------------------------------|-----------|--------------|
| Driver | 6 | 7,7 |
| Shopkeeper | 30 | 39 |
| Worker | 10 | 13 |
| Public Official | 9 | 11,7 |
| Retired | 19 | 24,7 |
| Soldier | 1 | 1,3 |
| Farmer | 2 | 2,6 |
| Total | 77 | 100,0 |

7.7% of the fathers of employed and single students are drivers, 39% are shopkeepers, 13% are workers, 11.7% are public officials, 24.7% are retired, 1.3% are soldiers, 2.6% are farmers (Table 11)

Table: 12
Distribution of income for single and employed students according to their mothers' income

| Mothers' income for employed and single students | f | % |
|---------------------------------------------------------|----------|------------|
| 0–655 | 3 | 3,9 |

| | | |
|--------------------|-----------|-------------|
| 656–1300 | 7 | 9,1 |
| 1301–1956 | 2 | 2,6 |
| Unspecified | 65 | 84,4 |
| Total | 77 | 100 |

3,9% of mothers of employed and single students have a monthly income in the range of 0–655 TL, 9,1% have a monthly income in the range of 656–1300 TL, 2,6% have a monthly income in the range of 1301–1956 TL. 84,4% have not specified any income (Table: 12).

**Table: 13
Distribution of mothers' profession for employed and single students**

| Mothers' profession for employed and single students | f | % |
|-------------------------------------------------------------|-----------|-------------|
| Public official | 5 | 6,5 |
| Housewife | 65 | 84,4 |
| Nurse | 1 | 1,3 |
| Teacher | 2 | 2,6 |
| Retired | 4 | 5,2 |
| Total | 77 | 100 |

6,5% of the mothers of employed and single students are public officials, 84,4% are housewives, 1,3% are nurses, 2,6% are teachers and 5,2% are retired individuals (Table: 13)

**Table:14
Distribution of spouses' profession for employed and married students**

| Spouses' profession for employed and married students | f | % |
|--------------------------------------------------------------|-----------|-------------|
| Housewife | 22 | 38,6 |
| Worker | 7 | 12,3 |
| Nurse | 5 | 8,8 |
| Public Official | 10 | 17,5 |
| Waiter/waitress | 1 | 1,8 |
| Shopkeeper | 5 | 8,8 |
| Teacher | 2 | 3,4 |
| Engineer | 1 | 1,8 |
| Soldier | 1 | 1,8 |
| Technician | 2 | 3,4 |
| Doctor | 1 | 1,8 |
| Total | 57 | 100 |

38,6% of the spouses of employed and married students are housewives, 12,3% are workers, 8,8% are nurses, 17,5% are public officials, 1,8% are waiters/waitresses, 8,8% are shopkeepers, 3,4% are teachers, 1,8% are engineers, 1,8% are soldiers, 3,4% are technicians and 1,8% are doctors.

**Table: 15
Distirbution of income for employed married students according to the income of their spouses**

| income level for employed married students according to the income of their spouses | f | % |
|-------------------------------------------------------------------------------------|----|------|
| 0–655 | 4 | 7 |
| 656–1300 | 19 | 33,3 |
| 1301–1956 | 11 | 19,4 |
| 2613–3268 | 1 | 1,7 |
| Unspecified | 22 | 38,6 |
| Total | 57 | 100 |

7% of spouses of employed students have a monthly income in the range of 0–655 TL, 33,3% in the range of 656–1300 TL, 19,4% in the range of 1301–1956 TL, 1,7% in the range of 2613–3268 TL. Since 38,6% of the spouses are housewives, their income has not been specified (Table: 15).

**Table: 16
Distribution of employed students according to access to computers at workplace**

| access to computers at workplace for employed students | f | % |
|--------------------------------------------------------|-----|------|
| Yes | 112 | 58,6 |
| No | 74 | 38,7 |
| Unspecified | 5 | 2,7 |
| Total | 191 | 100 |

58,6% of the employed students have access to computers at workplace whereas 38,7% of the employed students do not have access to computers at their workplaces (Table: 16).

**Table: 17
Distribution of employed students according to ownership of computers at home**

| Ownership of computers at home for employed students | f | % |
|------------------------------------------------------|-----|------|
| Yes | 146 | 76,4 |
| No | 41 | 21,4 |
| Unspecified | 4 | 2,2 |
| Total | 191 | 100 |

76,4% of employed students have computers at home whereas 21,4% do not. (Table: 17).

**Table. 18
Distribution of employed students with computers at workplace according to access to Internet**

| Internet access of employed students with computers at workplace | f | % |
|------------------------------------------------------------------|-----|------|
| Yes | 105 | 93,6 |
| No | 7 | 6,4 |
| Total | 112 | 100 |

93,6% of employed students with computers at work place have access to Internet whereas 6,4, % do not (Table: 18).

**Table: 19
Distribution of employed students with computers
at home according to Internet Access**

| Internet access of employed students with computers at workplace | f | % |
|------------------------------------------------------------------|------------|------------|
| Yes | 124 | 84,9 |
| No | 22 | 15,1 |
| Total | 146 | 100 |

84,9% of employed students who have computers at home have access to Internet whereas 15,1% of employed students who have computers at home do not (Table 19).

Table 20. Distribution of unemployed students according to ownership of computers at home

| Ownership of computers at home for unemployed students | f | % |
|--------------------------------------------------------|-----------|--------------|
| Yes | 11 | |
| | 6 | 73,4 |
| No | 42 | 26,6 |
| Total | 15 | 100,0 |
| | 8 | |

73,4% of unemployed students have computers at home whereas 26,6 % do not (Table: 20).

**Table: 21
Distribution of unemployed students with computers
at home according to access to Internet**

| Acess to internet for unemployed students who have computers at home | f | % |
|----------------------------------------------------------------------|-----------|------------|
| Yes | 99 | 85,3 |
| No | 17 | 14,7 |
| Total | 11 | 100 |
| | 6 | |

85,3% of unemployed students who have computers at home also have access to Internet however, 14,7% of unemployed students who have computers at home do not have access to Internet (Table: 21).

**Table: 22
Distribution of online follow-up of Open Education Faculty courses through Internet**

| | f | % |
|--------------------------------------------------------|----|------|
| Online follow-up of Open Education Faculty courses Yes | 12 | 33,2 |
| | 0 | |
| No | 24 | 72,8 |
| | 1 | |

| | | |
|-------|----|-----|
| Total | 36 | 100 |
| | 1 | |

33,2% of the students follow the courses online however 72,8% do not (Table 22).

Table: 23
Distribution of reasons why students cannot follow
Open Education Faculty courses online

| The reasons of following courses online | f | % |
|-----------------------------------------|-----------|--------------|
| Doesn't have time | 63 | 26,1 |
| Doesn't have computer | 32 | 13,3 |
| Doesn't find it effective | 10 | 4,1 |
| Goes to the course instead | 1 | 0,4 |
| Doesn't have Internet | 40 | 16,4 |
| It is unintelligible | 6 | 2,5 |
| Doesn't need it | 14 | 5,8 |
| Can not connect to page | 4 | 1,6 |
| No specified reason | 71 | 29,5 |
| Total | 24 | 100,0 |
| | 1 | |

As a reason of not following courses online, 26,1% of the students stated that they did not have the time, 13,3% stated that they did not have computers, 4,1% said that they did not find it efficient, 0,4% stated that they went to the course instead, 16,4% stated that they did not have Internet access, 2,5% said that online courses were unintelligible, 1,6% said that they could not connect to the page, 5,8% stated that they did not need it (Table 23).

Table: 24
Distirbution of students according to their study styles

| Style of Study | f | % |
|----------------------|----|------|
| Individually at home | 25 | 69,3 |
| | 0 | |
| Textbooks | 19 | 54,8 |
| | 8 | |
| Support materials | 23 | 63,7 |
| | 0 | |
| Library | 5 | 1,4 |
| TV | 26 | 7,2 |
| Advising classes | 51 | 14,1 |
| Friends | 37 | 10,2 |
| Other | 18 | 5,0 |

69,3% of the students study at home with individual study methods. This method is followed by using support materials (63.7%), using the textbook to study (54,8%), taking advising classes (14.1%), studying with friends (10.2%), following courses on TV (7.2%), going to library (14.1%) and other methods (5%) (Table 24)Second Research Question: Is there a relationship between personal characteristics- economic profiles of these students and their following the courses through Internet?

Table: 25
chi-square table for relationships between grade level and following online courses

| Grade level | Following Online courses | | | χ^2 | p |
|-------------|--------------------------|----------------|-------|----------|------|
| | Yes | No | Total | | |
| Freshman | 89 (%45,9) | 105 (%54,1) | 194 | | 190 |
| Sophomore | 41 (%39,8) | 62 (%60,2) | 103 | 3,379 | ,642 |

| | | | | | |
|--------|---------------|---------------|----|--|--|
| Junior | 11 (%50) | 11 (%50) | 22 | | |
| Senior | 13 (%58,8) | 11 (%41,2) | 24 | | |
| Total | 15 3 | 189 | | | |

Percentage of students in different grade levels following online courses 45,9%, 39,8%, 50% and 58,8% from freshmen year to senior year respectively. The percentage of students who do not follow the online courses are respectively 54,1%, 60,2%, 50% and 41,2% from freshmen to senior grades. χ^2 analysis ($\chi^2=3,379$, $p>0,05$) showed that there are no statistically meaningful relationships between grade level and following the courses online (Table: 25).

Table 26
chi-square table for relationships between age and following online courses

| Age | Following Online courses | | Total | χ^2 | p |
|------------|--------------------------|------------|-------|----------|------|
| | Yes | No | | | |
| 18-20 | 33 (%44,6) | 41 (%55,4) | 74 | | |
| 21-23 | 45 (%42,9) | 60 (%57,1) | 105 | 1,017 | ,907 |
| 24-26 | 26 (%51) | 25 (%49) | 51 | | |
| 27-29 | 13 (%44,8) | 16 (%55,2) | 29 | | |
| 30 ve üstü | 36 (%43,4) | 47 (%56,6) | 83 | | |
| Total | 153 | 189 | 342 | | |

Percentage of students following courses online are 44,6%, 42,9%, 51%, 44,8% and 43,4% respectively for age ranges 18-20; 21-23, 24-26, 27-29 and 30 and the percentages who do not follow courses online are 55,4%, 57,1%, 49%, 55,2% and 56,6% respectively for the age ranges 18-20; 21-23, 24-26, 27-29 and 30. χ^2 analysis ($\chi^2=1,017$, $p>0,05$) showed that there are no statistically meaningful relationships between age and following the courses online (Table 26).

Table: 27
chi-square table for relationships between gender and following online courses

| Gender | Following Online courses | | Total | χ^2 | p |
|--------|--------------------------|---------------|-------|-----------|-------------|
| | Yes | No | | | |
| Female | 87(%49, 2) | 90 (%50,8) | 177 | | |
| Male | 66 (%40) | 99 (%60) | 165 | 2,8 93 | ,089 |
| Total | 153 | 189 | 342 | | 49,2% of |

female students and 40% of male students follow courses online. These values are 50,8% and 60% respectively for female and male students who do not follow courses online. χ^2 analysis ($\chi^2=2,893$, $p>0,05$) showed that there are no¹⁹¹ statistically meaningful relationships between gender and following the courses online (Table 27).

Table: 28
chi-square table for relationships between marital status and following online courses

| Marital Status | <u>Following Online courses</u> | | | χ^2 | p |
|----------------|---------------------------------|----------------|-------|----------|------|
| | Yes | No | Total | | |
| Married | 41 (%47,1) | 46 (%52,9) | 87 | | |
| Single | 112 (43,9) | 143 (%56,1) | 155 | ,269 | ,604 |
| Total | 153 | 189 | 342 | | |

47,1% of married students and 43,9% of single students follow courses online. These values are respectively 52,9% and 56,1% for students who do not follow courses online. χ^2 analysis ($\chi^2=0,269$, $p>0,05$) showed that there are no statistically meaningful relationships between marital status and following the courses online (Table. 28).

Table: 29
chi-square table for relationships between student accommodation and following courses online

| Accommodation | <u>Following Online courses</u> | | | χ^2 | p |
|-------------------------------|---------------------------------|------------|-------|----------|------|
| | Yes | No | Total | | |
| Rent | 44 (%41,5) | 62 (%58,5) | 106 | | |
| Housing assigned by workplace | 14 (%46,7) | 16 (%53,3) | 30 | 1,8 | ,770 |
| Family owned | 60 (%45,5) | 72 (%54,5) | 132 | 12 | |
| Individually owned | 33 (%49,3) | 34 (%50,7) | 67 | | |
| Others | 2 (%28,6) | 5 (%71,4) | 7 | | |
| Total | 153 | 189 | 342 | | |

5% of students who live in rental houses, 46.7% of students who live in housing assigned by workplace, 45.5% of students who live with their families and 49.3% of students who live in their own houses state that they follow courses online. Percentages of students who state that they do not follow courses online are 58,5%, 53,3%, 54,5% and 50,7% respectively. χ^2 analysis ($\chi^2=1,812$, $p>0,05$) showed that there are no statistically meaningful relationships between accommodation and following the courses online (Table 29).

Table: 30
chi-square table for relationships between student employment and following courses online

| Employment status | <u>Following Online courses</u> | | | χ^2 | p |
|-------------------|---------------------------------|------------|-------|----------|------|
| | Evet | Hayır | Total | | |
| Full Time | 85 (%46,7) | 97 (%53,3) | 182 | | |
| No Job | 62 (%41,9) | 86 (%58,1) | 148 | ,90 4 | ,636 |
| Part Time | 6 (%50) | 6 (%50) | 12 | | |
| Total | 153 | 189 | 342 | | |

students who work full time, 50% of students who work part time and 41.9% of students with no jobs follow courses online. These values are 53,3%, 58,1% and 46.7% of

50% respectively for students who do not follow courses online. χ^2 analysis ($\chi^2=0,904$, $p>0,05$) showed that there are no statistically meaningful relationships between employment status and following the courses online (Table 30).

Table: 31
chi-square table for relationships between student income levels and following courses online

| Income | <u>Following Online courses</u> | | | χ^2 | p SD=2 |
|----------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| 0–655 | 24 (%54,5) | 20 (%45,5) | 44 | | |
| 656–1300 | 49 (%52,1) | 45 (%47,9) | 94 | 7,558 | ,180 |
| 1301 and above | 14 (%41,9) | 26 (%58,1) | 40 | | |
| Total | 87 | 91 | 178 | | |

Percentages of students placed in three different income levels who follow courses online are respectively 54,5%, 52,1% and 41,9%. The percentages of students who do not follow courses online are respectively 45,5%, 47,9% and 58,1% for the three different income levels. χ^2 analysis ($\chi^2=7,558$, $p>0,05$) showed that there are no statistically meaningful relationships between income levels and following the courses online (Table 31).

Table: 32
chi-square table for relationships between fathers' income levels and following courses online for students who unemployed

| Father's income level if the student is unemployed | <u>Following Online courses</u> | | | χ^2 | p SD=2 |
|----------------------------------------------------|---------------------------------|---------------|-------|----------|-----------|
| | Yes | No | Total | | |
| 0–655 | 11 (%34,4) | 21 (%65,6) | 32 | | |
| 656–1300 | 30 (%46,2) | 35 (%53,8) | 65 | 6,106 | ,411 |
| 1301 and above | 10 (%40) | 12 (%60) | 22 | | |
| Total | 51 | 68 | 119 | | |

Percentages of unemployed students whose fathers' income levels are 0–655, 656–1300 and 1301 and above that follow the courses online are respectively 34,4%, 46,2% and 40% whereas the unemployed students who do not follow the courses online have the percentages of 65,6%, 53,8% and 60% respectively. χ^2 analysis ($\chi^2=6,106$, $p>0,05$) showed that there are no statistically meaningful relationships between income levels of fathers for unemployed students and following the courses online (Table: 32).

Table: 33
chi-square table for relationships between having access to internet at workplace and following courses online for students who are employed

| Computer access at workplace | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|------------------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 57 (%53,3) | 50 (%46,7) | 107 | | |
| No | 26 (%36,1) | 46 (%63,9) | 72 | 5,096 | ,024 |
| Total | 83 | 96 | 179 | | |

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It was seen that employed students with access to Internet at workplace who follow courses online (53,3%) are higher than the students who do not follow courses online

(46,7%). However, employed students with no access to Internet at workplace who follow courses online (63,9%) are higher than the students who do not follow courses online (36,1%). χ^2 analysis ($\chi^2=5,096$, $p<0,05$) showed that there are no statistically meaningful relationships for employed students between having access to computers at workplace and following the courses online (Table 33).

Table: 34
chi-square table for relationships between having a computer at home and following courses online for students who are employed

| Having a computer at home (employed students) | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|-----------------------------------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 71 (%50,7) | 69 (%49,3) | 140 | | |
| No | 13 (%32,5) | 27 (%67,5) | 40 | 4,147 | ,042 |
| Total | 84 | 96 | 180 | | |

50.7% of employed students who have computers at home and 32.5% of employed students with no computers at home follow courses online. On the other hand, 49.3% of employed students with computers at home and 67.5% of employed students with no computers at home can not follow courses online. χ^2 analysis ($\chi^2=4,147$, $p<0,05$) showed that there are statistically meaningful relationships for employed students between having computers at home and following the courses online (Table 34).

Table 35: chi-square table for relationships between having a computer and Internet access at workplace and following courses online for students who are employed

| Internet access and computer at workplace | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|-------------------------------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 57 (%57,0) | 43 (%43) | 100 | | |
| No | 25 (%32,1) | 53 (%67,9) | 78 | 10,978 | ,001 |
| Total | 82 | 96 | 178 | | |

57% of employed students with access to computers and Internet can follow courses online however only 32.1% of employed students with computers but no access to Internet can follow courses online. On the other hand, 49.3% of employed students with access to both computers and Internet and 67.5% of employed students with access to computers but not to Internet do not follow courses online. χ^2 analysis ($\chi^2=10,978$, $p<0,05$) showed that there are statistically meaningful relationships for employed students between having computer and Internet access at work and following the courses online (Table: 35).

Table: 36
chi-square table for relationships between having a computer and Internet access at home and following courses online for students who are employed

| Internet at home | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 65 (%54,6) | 54 (%45,4) | 119 | 8,929 | ,003 |
| No | 19 (%31,1) | 42 (%68,9) | 61 | | |
| Total | 84 | 96 | 180 | | |

54.6 % of employed students who have computers and Internet access at home follow courses online and only 31.1% of employed students with computers but no Internet

access do so. On the other hand, 45.4% of employed students with both computer and Internet access at home and 68.9% of employed students with computers at home with no Internet access do not follow courses online. χ^2 analysis ($X^2=5,096$, $p<0,05$) showed that there are statistically meaningful relationships for employed students between having computer and Internet access at home and following the courses online (Table. 36).

Table: 37
chi-square table for relationships between having a computer access at home and following courses online for students who are unemployed

| Computer at home (unemployed) | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|----------------------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 62 (%54,4) | 52 (%45,6) | 114 | 20,396 | ,000 |
| No | 5 (%12,8) | 34 (%87,2) | 39 | | |
| Total | 67 | 86 | 153 | | |

54.4% of unemployed students with computers at home and 12.8% of unemployed students with no computers at home follow courses online. On the other hand, 45.6% of unemployed students with computers at home and 82.7% of unemployed students with no computers at home do not follow courses online. χ^2 analysis ($X^2=20,396$, $p<0,05$) showed that there are statistically meaningful relationships for unemployed students between having computer access at home and following the courses online (Table 37).

Table: 38
chi-square table for relationships between having a computer and Internet access at home and following courses online for students who are unemployed

| Internet Access at home (unemployed) | <u>Following Online courses</u> | | | χ^2 | p SD=1 |
|-----------------------------------------|---------------------------------|------------|-------|----------|-----------|
| | Yes | No | Total | | |
| Yes | 59 (%60,8) | 38 (%39,2) | 97 | 30,497 | ,000 |
| No | 8 (%14,5) | 47 (%85,5) | 55 | | |
| Total | 67 | 85 | 152 | | |

60.8% of unemployed students who have computers and Internet access at home whereas only 14.5% of unemployed students with computers but no Internet access can do so. On the other hand, 39.2% of unemployed students with both computer and Internet access at home and 85.5% of unemployed students with computers at home with no Internet access do not follow courses online. χ^2 analysis ($X^2=5,096$, $p<0,05$) showed that there are statistically meaningful relationships for unemployed students between having computer and Internet access at home and following the courses online (Table: 38).

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

This study was undertaken in order to determine the economic profiles of Open Education Faculty students and to identify the relationships between variables of various economic profiles and personal demographics with following courses online. At the end of the study several findings related to students' economic profiles were obtained.

The majority of the students are living either with their parents or they are renting. If the student is attending the university in another city other than his/her parents'

hometown, he/she has to shoulder extra costs. Deciding to continue with learning is the cost of education to the individual (Kurul Tural, 2002). When individuals spend their time with education, they will miss the opportunity to work and earn an income (Adem, 1993). However, as can be seen from the results of this study, more than half of the participants are employed. In this context, being a student at Open Education Faculty provides the students with the chance of both working and continuing with higher education.

The basis of preferring university education is the desire to move to primary level professions from secondary labor market professions (working at the pharmacy, technician, worker, driver etc). Professions at the secondary labor market are less paying jobs since they have less security and require lower levels of qualifications (Unal, 2006). When the distribution of students in the research according to professions is examined it is seen that the majority works at secondary labor market jobs with a lower level of income such as 0-1300 TL monthly income. Receiving education at Open education faculty provides an opportunity for the students to transfer to primary labor market professions in this context.

Amount of resources that the individual and his/her family will allocate to education from their budgets is affected from factors such as the income of the family, individual acquisitions gained from education and the cost of education (Kurul Tural, 2002). In the research the income levels of parents for both employed and unemployed students are mostly in the range of 0-1300 TL. Since almost all mothers are housewives, they do not have a separate income. The professions of fathers are generally worker, retired, self employed and public official for both single and employed and unemployed students. The facts that the students in the research sample belong to lower income levels and that they have to work in jobs at secondary levels can be the basic reasons for these students to attend Open Education Faculty.

Right to obtain services in education is protected by law. However, it does not mean that there are no inequalities in education in terms of opportunity and resources. It is now accepted that provision of services, individual differences and socio-economic factors of the country affect inequalities in terms of opportunity and resources. These variables are related to economic (level of income, distribution of income) and social factors (gender, language, distribution of population, size of family, level of parents' education etc) (Unal, 1996). Using Internet in education increases the inequalities in that sense. The individuals who can easily acquire and utilize Internet as a tool for education are the ones who are in the upper and middle economic levels of society. When we think of the fact that costs of benefiting from the programs of universities all over the world which provides distance education are very high, we will see that it creates another inequality of opportunity for individuals at the lower economic levels. Hence globalization does not serve any purposes other than providing the already well off individuals to easily benefit from all high quality services-as long as they pay for them. This is the most concrete example of using education as a commodity by distance education through the use of Internet (Gokce, 2008). The results of the current study also provide similar findings. Results show that 58.6% of employed students have computers at the workplace and 93.6% of these computers have Internet connection. The 76.4% of the same students also have computers at home and 93.6% of them have Internet access in their homes. On the other hand, 73.4% of the unemployed students have computers and 85.3% are connected to Internet. Although that is the case and the majority of the students have computers and Internet access both at home and at the workplace, 72.8% of them do not benefit from Internet in following their courses online which is a very important finding.

As a reason for the lack of Internet use in this regard, 26.1% of the students state that they do not have time, 13.3% of the students say that they do not have computers, 4.1% state that they do not find Internet efficient, 0.4% state that they prefer attending the courses, 16.4% state that they do not have Internet access, 2.5% state that the site is unintelligible, 1.6% state that it is difficult to get connected to the page and 5.8% state that they do not need the online courses. Lack of awareness required for following the courses online, lack of understanding about the importance of the procedures or lack of necessary skills-competences as stated by Esgi (2006) may be some of the reasons that prevent students from utilizing Internet to follow their courses. 69.3% of the students stated that they study by themselves, 63.7% uses supporting materials, 54.8% uses textbooks, 14.1% receives tutoring, 10.2% studies with friends, 7.2% follows courses through TV, 1.4% goes to library to study and 5% uses other methods to learn. According to research results of Mutlu, Ozturk and Cetinoz (2002), minority of students prefer following the textbooks, almost half of the students or more prefer the application section, videos and practices. Only a quarter of the students are in relation with their academic advisors. The results of both studies are similar in these respects.

Findings regarding the relationships between variables of economic profiles and personal demographics of students and flowing course online yield these results: there are no relations between variables such as grade level, age, gender and marital status and their use of Internet to follow courses online. The result obtained regarding the variable gender is similar to the findings of Atan, Sulaiman, Rahman & Idrus (2002); Cakir-Balta and Horzum (2008), Chou, Condron and Belland (2005), Morahan-Martin and Schumacker (2000) and Soule et. al (2003). On the other hand, this result does not support the findings of Durndell & Haag (2002), Schumacher & Morahan-Martin (2001), Su, Bonk, Magjuka, Liu & Lee (2005), Tekinarslan (2008) and Tsai, Lin & Tsai (2001).

There are no statistically meaningful relationships between variables such as type of accommodation, status of employment, students' level of income and fathers' level of income and following courses online.

On the other hand, economic profile variables such as having access to computers and at home for employed students have a meaningful relationship with following courses online. Along the same lines, variables such as having access to Internet for employed students both at work and at home are statistically related to following courses online. There are also meaningful relationships between variables such as having a computer at home and having access to Internet for unemployed students and following courses online. These findings show that number of students who follow courses online and who have computers and Internet access at home are higher than the number of students with no Internet connection. This finding supports Dursun's (2004) study that suggests that following courses online is dependent on having computer and Internet access at home.

As a result we can argue that the economic profile of an individual affects his/her academic future in a sense. Individuals may need to give up many opportunities in their lives in order to receive education. If the income of the individual and his/her family is low or close to middle levels, the individual may need to give up the costs of education. Open Education Faculty which is accepted as an opportunity for individuals who may need to give up the cost of education has prepared an online e-learning website in order to increase the quality of education and to present students with alternative study techniques. However, it is a striking result that the majority of students with computers and Internet access at home do not utilize the Internet in their studies.

In this context, studies are necessary to embed awareness and understanding of the importance required to follow courses online, trainings should be provided to create the required skills and competences and country based research should be undertaken to investigate the lack of Internet use in following classes.

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